

IN THE CLAIMS

1. (Currently Amended) A plasticized polyolefin composition comprising from 99.9 wt% to 60 wt% polyolefin; and from 0.1 wt% to 40 wt% of a non-functionalized plasticizer; wherein the non-functionalized plasticizer comprises C₆ to C₂₀₀ paraffins having a pour point of less than -30°C and wherein elastomers are substantially absent from the composition, and wherein the polyolefin is selected from propylene homopolymers, propylene copolymers, propylene impact copolymers, or mixtures thereof, where the propylene impact copolymers are reactor blends.
2. (Previously Presented) The composition of Claim 1, wherein the non-functionalized plasticizer comprises C₈ to C₁₀₀ paraffins.
3. (Previously Presented) The composition of Claim 1, wherein the non-functionalized plasticizer comprises C₆ to C₅₀ isoparaffins.
4. (Previously Presented) The composition of Claim 1, wherein the non-functionalized plasticizer comprises C₁₀ to C₁₀₀ n-paraffins.
5. (Original) The composition of Claim 1, wherein the T_g of the polyolefin decreases from 4 to 10°C for every 4 wt% of non-functionalized plasticizer added to the composition, while the T_m remains within 1 to 2 °C.
6. (Previously Presented) The composition of Claim 1, wherein the non-functionalized plasticizer has a pour point of less than -40°C.
7. (Original) The composition of Claim 1, wherein the non-functionalized plasticizer has a viscosity of from 0.1 to 3000 cSt at 100°C.

8. (Previously Presented) The composition of Claim 1, wherein the non-functionalized plasticizer has a dielectric constant at 20°C of less than 2.3.
9. (Previously Presented) The composition of Claim 1, wherein the non-functionalized plasticizer has a specific gravity of less than 0.91.
10. (Original) The composition of Claim 1, wherein aromatic moieties are substantially absent from the non-functionalized plasticizer.
11. (Original) The composition of Claim 1, wherein the weight average molecular weight of the non-functionalized plasticizer is from 100 to 25,000 g/mol.
12. (Original) The composition of Claim 1, wherein the weight average molecular weight of the non-functionalized plasticizer is from 200 to 10,000 g/mol.
13. (Original) The composition of Claim 1, wherein the polyolefin comprises segments that are isotactic.
14. (Previously Presented) The composition of Claim 1, wherein the polyolefin is selected from propylene homopolymers, propylene copolymers, or mixtures thereof.
15. (Original) The composition of Claim 1, wherein polyolefin is isotactic polypropylene.
16. (Previously Presented) The composition of Claim 1, wherein the polyolefin is a copolymer comprising propylene derived units and units selected from ethylene derived units or C₄ to C₂₀ α-olefin derived units.
17. (Original) The composition of Claim 11, wherein the polyolefin is a propylene impact copolymer comprising from 40% to 95% by weight of a Component A and

from 5% to 60% by weight of a Component B based on the total weight of copolymer; wherein Component A comprises propylene homopolymer or copolymer, the copolymer comprising 10% or less by weight ethylene, butene, hexene or octene comonomer; and wherein Component B comprises propylene copolymer, wherein the copolymer comprises from 5% to 70% by weight ethylene, butene, hexene and/or octene comonomer, and from 95% to 30% by weight propylene.

18. (Original) The composition of Claim 14, further comprising a plastomer.
19. (Original) The composition of Claim 1, wherein polyethylene having a weight average molecular weight of from 500 to 10,000 is substantially absent.
20. (Previously Presented) An article of manufacture selected from films, sheets, fibers, woven and nonwoven fabrics, tubes, pipes, automotive components, furniture, sporting equipment, food storage containers, transparent and semi-transparent articles, toys, tubing and pipes, or medical devices comprising the composition of Claim 1.
21. (Currently amended) A plasticized polyolefin composition comprising from 99.9 wt% to 60 wt% polyolefin; and from 0.1 wt% to 40 wt% of a non-functionalized plasticizer having a pour point of less than -30°C; wherein the T_g of the polyolefin decreases by at least 2°C for every 4 wt% of non-functionalized plasticizer added to the composition, while the T_m remains within 1 to 2 °C, and wherein elastomers are substantially absent from the composition, and wherein the polyolefin is selected from propylene homopolymers, propylene copolymers, propylene impact copolymers, or mixtures thereof, where the propylene impact copolymers are reactor blends.
22. (Previously Presented) The composition of Claim 21, wherein the non-functionalized plasticizer comprises C_8 to C_{100} paraffins.

23. (Previously Presented) The composition of Claim 21, wherein the non-functionalized plasticizer comprises C₆ to C₅₀ isoparaffins.
24. (Previously Presented) The composition of Claim 21, wherein the non-functionalized plasticizer comprises C₁₀ to C₁₀₀ n-paraffins.
25. (Previously Presented) The composition of Claim 21, wherein the T_g of the polyolefin decreases from 4 to 10°C for every 4 wt% of non-functionalized plasticizer added to the composition, while the T_m remains within 1 to 2 °C.
26. (Previously Presented) The composition of Claim 21, wherein the non-functionalized plasticizer has a pour point of less than -40°C.
27. (Original) The composition of Claim 21, wherein the non-functionalized plasticizer has a viscosity of from 0.1 to 3000 cSt at 100°C.
28. (Previously Presented) The composition of Claim 21, wherein the non-functionalized plasticizer has a dielectric constant at 20°C of less than 2.3.
29. (Previously Presented) The composition of Claim 21, wherein the non-functionalized plasticizer has a specific gravity of from 0.700 to 0.860.
30. (Original) The composition of Claim 21, wherein aromatic moieties are substantially absent from the non-functionalized plasticizers.
31. (Original) The composition of Claim 21, wherein the weight average molecular weight of the non-functionalized plasticizer is from 200 to 25,000 g/mol.
32. (Original) The composition of Claim 21, wherein the weight average molecular weight of the non-functionalized plasticizer is from 200 to 10,000 g/mol.

33. (Original) The composition of Claim 21, wherein the polyolefin is an isotactic propylene homopolymer.
34. (Previously Presented) The composition of Claim 21, wherein the polyolefin is selected from propylene homopolymers, propylene random copolymers, propylene block copolymers, propylene impact copolymers, or mixtures thereof.
35. (Previously Presented) An article of manufacture selected from films, sheets, fibers, woven and nonwoven fabrics, tubes, pipes, automotive components, furniture, sporting equipment, food storage containers, transparent and semi-transparent articles, toys, tubing and pipes, or medical devices comprising the composition of Claim 21.
36. (Withdrawn) A method of plasticizing a polyolefin comprising blending a polyolefin with a non-functionalized plasticizer; wherein the non-functionalized plasticizer comprises C₆ to C₂₀₀ paraffins having a pour point of less than -5°C.
37. (Withdrawn) The method of Claim 36, wherein the blending comprises melt blending.
38. (Withdrawn) The method of Claim 36, wherein the melt blending is performed in an extruder.
39. (Withdrawn) The method of Claim 36, wherein the blending comprises wet blending of solid polyolefin.
40. (Withdrawn) The method of Claim 36, wherein the polyolefin is in the form of reactor granules or extruded pellets.

41. (Withdrawn) The method of Claim 36, wherein the reactor granules have an average diameter of from 10 μm to 5 mm.
42. (Withdrawn) The method of Claim 36, wherein the non-functionalized plasticizer has a pour point of less than -30°C.
43. (Withdrawn) The method of Claim 36, wherein the non-functionalized plasticizer has a viscosity of from 1 to 3000 cSt at 100°C.
44. (Withdrawn) The method of Claim 36, wherein the non-functionalized plasticizer has a viscosity of from 2 to 300 cSt at 100°C.
45. (Withdrawn) The method of Claim 36, wherein the non-functionalized plasticizer has a specific gravity of less than 0.91 g/cm³.
46. (Withdrawn) The method of Claim 36, wherein the non-functionalized plasticizers comprises C₈ to C₁₀₀ paraffins.
47. (Withdrawn) The method of Claim 36, wherein the non-functionalized plasticizers comprises C₆ to C₅₀ isoparaffins.
48. (Withdrawn) The method of Claim 36, wherein the non-functionalized plasticizers comprises C₁₀ to C₁₀₀ n-paraffins.
49. (Withdrawn) The method of Claim 36, wherein the polyolefin comprises segments that are isotactic.
50. (Withdrawn) The method of Claim 36, wherein the polyolefin is a homopolymer or copolymer comprising propylene derived units.

51. (Withdrawn) The method of Claim 36, wherein the polyolefin is a propylene homopolymer.
52. (Withdrawn) The method of Claim 36, wherein the copolymer comprises propylene derived units and units selected from ethylene derived units and C₄ to C₂₀ α -olefin derived units.
53. (Withdrawn) The method of Claim 36, wherein the copolymer is selected from random copolymers, block copolymers, impact copolymers, and mixtures thereof.
54. (Withdrawn) The method of Claim 36, wherein plasticizers such as phthalates, adipates, trimellitate esters, and polyesters are substantially absent.
55. (Withdrawn) The method of Claim 36, wherein polyethylene having a weight average molecular weight of from 500 to 10,000 is substantially absent.
56. (Withdrawn) An article of manufacture selected from films, sheets, fibers, woven and nonwoven fabrics, tubes, pipes, automotive components, furniture, sporting equipment, food storage containers, transparent and semi-transparent articles, toys, tubing and pipes, and medical devices made by the method of Claim 36.
57. (Previously Presented) The composition of claim 1 wherein the non-functionalized plasticizer has a pour point of less than -40°C.
58. (Previously Presented) The composition of claim 1 wherein the non-functionalized plasticizer has a pour point of less than -50°C.
59. (Previously Presented) The composition of claim 1 wherein the non-functionalized plasticizer has a pour point of less than -60°C.

60. (Previously Presented) The composition of claim 21 wherein the non-functionalized plasticizer has a pour point of less than -40°C.
61. (Previously Presented) The composition of claim 21 wherein the non-functionalized plasticizer has a pour point of less than -50°C.
62. (Previously Presented) The composition of claim 21 wherein the non-functionalized plasticizer has a pour point of less than -60°C.
63. (New) The composition of Claim 1, wherein the polyolefin is selected from propylene homopolymers, propylene impact copolymers, or mixtures thereof.
64. (New) The composition of Claim 21, wherein the polyolefin is selected from propylene homopolymers, propylene impact copolymers, or mixtures thereof.
65. (New) The composition of claim 63 wherein the composition further comprises plastomer having a 1% secant flexural modulus of from 10 MPa to 150 MPa.
66. (New) The composition of claim 1 where the composition further comprises a plastomer which is a copolymer of ethylene and from 2 to 35 weight % of C₃ to C₁₀ alpha-olefin derived units.
67. (New) The composition of claim 63 where the composition further comprises a plastomer which is a copolymer of ethylene and from 2 to 35 weight % of C₃ to C₁₀ alpha-olefin derived units.
68. (New) The composition of claim 64 wherein the composition further comprises plastomer having a 1% secant flexural modulus of from 10 MPa to 150 MPa.
69. (New) The composition of claim 1 wherein the composition further comprises plastomer having a 1% secant flexural modulus of from 10 MPa to 150 MPa.

70. (New) The composition of claim 64 where the composition further comprises a plastomer which is a copolymer of ethylene and from 2 to 35 weight % of C₃ to C₁₀ alpha-olefin derived units.
71. (New) The composition of Claim 1, wherein the polyolefin is selected from propylene copolymers, propylene impact copolymers, or mixtures thereof.
72. (New) The composition of Claim 21, wherein the polyolefin is selected from propylene copolymers, propylene impact copolymers, or mixtures thereof.
73. (New) The composition of claim 71 wherein the composition further comprises plastomer having a 1% secant flexural modulus of from 10 MPa to 150 MPa.
74. (New) The composition of claim 71 where the composition further comprises a plastomer which is a copolymer of ethylene and from 2 to 35 weight % of C₃ to C₁₀ alpha-olefin derived units.
75. (New) The composition of claim 72 wherein the composition further comprises plastomer having a 1% secant flexural modulus of from 10 MPa to 150 MPa.
76. (New) The composition of claim 72 where the composition further comprises a plastomer which is a copolymer of ethylene and from 2 to 35 weight % of C₃ to C₁₀ alpha-olefin derived units.
77. The composition of Claim 1 further comprising a plastomer.
78. (New) The composition of claim 63 wherein the composition further comprises plastomer having a melting temperature of from 30 to 80 °C (first melt peak) and from 50 to 125 (second melt peak).

79. (New) The composition of claim 64 wherein the composition further comprises plastomer having a melting temperature of from 30 to 80 °C (first melt peak) and from 50 to 125 (second melt peak).
80. (New) The composition of claim 71 wherein the composition further comprises plastomer having a melting temperature of from 30 to 80 °C (first melt peak) and from 50 to 125 (second melt peak).
81. (New) The composition of claim 72 wherein the composition further comprises plastomer having a melting temperature of from 30 to 80 °C (first melt peak) and from 50 to 125 (second melt peak).
82. (New) The composition of claim 1 wherein the composition further comprises plastomer having a melting temperature of from 30 to 80 °C (first melt peak) and from 50 to 125 (second melt peak).
83. (New) The composition of claim 1 wherein the composition further comprises a metallocene catalyzed copolymer of ethylene and propylene, 1-butene, 1-hexene, or 1-octene having a density of 0.86 to 0.900 g/cm³ and an Mw/Mn of 1.5 to 5.
84. (New) The composition of claim 1 wherein the composition further comprises a metallocene catalyzed copolymer of ethylene and 1-butene, 1-hexene, or 1-octene having a density of 0.86 to 0.900 g/cm³ and an Mw/Mn of 1.5 to 5.
85. (New) The composition of claim 1 wherein the composition further comprises a metallocene catalyzed copolymer of ethylene and 1-octene having a density of 0.86 to 0.900 g/cm³ and an Mw/Mn of 1.5 to 5.
86. (New) A plasticized polyolefin composition comprising from 99.9 wt% to 60 wt% polyolefin; and from 0.1 wt% to 40 wt% of a non-functionalized plasticizer; wherein the non-functionalized plasticizer comprises C₆ to C₂₀₀ paraffins having a

pour point of less than -30°C, wherein the polyolefin is selected from propylene homopolymers, propylene copolymers, propylene impact copolymers, or mixtures thereof, where the propylene impact copolymers are reactor blends, and where elastomers are not added to the composition.

87. (New) A plasticized polypropylene composition comprising from 99.9 wt% to 60 wt% polypropylene; and from 0.1 wt% to 40 wt% of a non-functionalized plasticizer; wherein the non-functionalized plasticizer comprises C₆ to C₂₀₀ paraffins having a pour point of less than -30°C, wherein the polypropylene is selected from propylene homopolymers, propylene copolymers, propylene impact copolymers, or mixtures thereof, where the propylene impact copolymers are reactor blends, and where the composition excludes physical blends of the polypropylene with other polyolefins.
88. (New) The composition of claim 1 further comprising nucleating agents.